UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/746,228	12/26/2000	Toshitaka Nakamura	N02-125045M/KOH	1148

21254 7590 11/22/2002

MCGINN & GIBB, PLLC
8321 OLD COURTHOUSE ROAD
SUITE 200
VIENNA, VA 22182-3817

EXAMINER
MARKHAM, WESLEY D

ART UNIT	PAPER NUMBER
1762	16

DATE MAILED: 11/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

AS16

Advisory Action	Application No.	Applicant(s)	
	09/746,228	NAKAMURA ET AL.	
	Examiner	Art Unit	
	Wesley D Markham	1762	

--The MAILING DATE of this communication appears on the cov r she t with the correspondence address --

THE REPLY FILED 08 November 2002 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires *4* months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2.☒ The proposed amendment(s) will not be entered because:

(a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);

(b) ☐ they raise the issue of new matter (see Note below);

(c) ☒ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

(d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: *see attached Office Action*.

3.☒ Applicant's reply has overcome the following rejection(s): *See Continuation Sheet*.

4.☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5.☐ The a)☐ affidavit, b)☐ exhibit, or c)☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.

6.☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7.☒ For purposes of Appeal, the proposed amendment(s) a)☒ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: *13-22*.

Claim(s) withdrawn from consideration: _____.

8.☒ The proposed drawing correction filed on *08 November 2002* is a)☒ approved or b)☐ disapproved by the Examiner.

9.☒ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). *12 and 13*.

10.☐ Other: _____

WDM

Continuation of 3. Applicant's reply has overcome the following rejection(s): The 35 U.S.C. 112, first paragraph ("new matter"), rejection of Claims 13-22.

SHRIVE P. BECK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

DETAILED ACTION / ADVISORY ACTION

Response to Amendment

1. Acknowledgement is made of applicant's proposed amendment C, filed as paper #15 on 11/8/2002, in which the applicant proposed to amend Claims 16, 17, 20, and 21. However, as entry of this amendment would raise new issues that would require further searching and/or consideration, the amendment has not been entered. Specifically, proposed amended Claims 16 and 20 would require depositing the low-refractive-index thin film before depositing any high-refractive-index thin film. Proposed amended Claims 17 and 21 would require depositing the low-refractive-index thin film after all of the high-refractive-index thin films are deposited. These limitations would narrow the scope of Claims 16, 17, 20, and 21, thereby requiring further searching and/or consideration.

Information Disclosure Statement

2. Acknowledgement is made of the information disclosure statements filed by the applicant on 8/2/2002 and 10/30/2002 as paper #s 12 and 13, respectively. The documents listed thereon have been considered as indicated on the attached copies of the PTO-1449 forms.

Drawings

3. The proposed drawing correction and/or the proposed substitute sheets of drawings (i.e., 1 sheet, amending the "REFLECTIVITY" axis in Figure 3), filed on 11/8/2002,

has been approved by the examiner. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

4. The Patent and Trademark Office no longer makes drawing changes. See 1017 O.G. 4. It is applicant's responsibility to ensure that the drawings are corrected. Corrections must be made in accordance with the instructions below.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

Correction of Informalities -- 37 CFR 1.85

New corrected drawings must be filed with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. If corrected drawings are required in a Notice of Allowability (PTOL-37), the new drawings **MUST** be filed within the **THREE MONTH** shortened statutory period set for reply in the "Notice of Allowability." Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136 for filing the corrected drawings after the mailing of a Notice of Allowability. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

Corrections other than Informalities Noted by Draftsperson on form PTO-948.

All changes to the drawings, other than informalities noted by the Draftsperson, **MUST** be made in the same manner as above except that, normally, a highlighted (preferably red ink) sketch of the changes to be incorporated into the new drawings **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.

Timing of Corrections

Applicant is required to submit acceptable corrected drawings within the time period set in the Office action. See 37 CFR 1.185(a). Failure to take corrective action within the set (or extended) period will result in **ABANDONMENT** of the application.

Response to Arguments

5. Applicant's arguments filed on 11/8/2002 have been fully considered but they are not persuasive.

6. First, the applicant argues that Claims 16, 17, 20, and 21 are sufficiently definite under 35 U.S.C. 112, second paragraph, in light of the amendments to the claims made in applicant's amendment C. However, as this amendment has not been entered for the reasons set forth above in paragraph 1, the applicant's argument regarding Claims 16, 17, 20, and 21 is moot.

7. Second, regarding the 35 U.S.C. 112, second paragraph, rejection of Claims 18 and 22, the applicant argues that one of ordinary skill in the art would understand that the additional method step is the forming of a plasma display filter with the transparent laminate. In response, this argument still does not clarify the situation set forth by the examiner in paragraph 10 of the previous Office Action (i.e., the final Office Action, paper #11, mailed on 7/16/2002). Specifically, Claims 18 and 22 recite a method "further comprising forming a plasma display panel filter with the transparent laminate". The transitional phrase "further comprising" indicates that additional process steps are required. However, the claims do not set forth these steps. What other steps are necessary to form a plasma display panel (PDP) filter? Are there any other steps necessary at all, or is the transparent laminate itself sufficient to be a "plasma display panel filter"? It appears to the examiner that, by performing the process steps recited in independent Claims 13 and 14, a

transparent laminate is formed that can be used as a PDP filter. If this is the case, what other process steps does the applicant intend to add to Claims 18 and 22 by reciting "forming of a plasma display filter with the transparent laminate"? As such, one skilled in the art would not be reasonably apprised of the scope of Claims 18 and 22, and therefore the claims are indefinite under 35 U.S.C. 112, second paragraph.

8. Third, regarding the 35 U.S.C. 112, first paragraph, rejection of Claims 13 – 22 for containing "new matter", the applicant argues that the specification as originally filed provides support for more than 3 or 4 combination thin film layers at, for example, page 14, line 25 through page 15, line 3. The examiner agrees with the argument, and therefore the 35 U.S.C. 112, first paragraph, rejection of Claims 13 – 22 is withdrawn. However, the examiner notes that all the claims in the instant application require producing a transparent laminate. As such, the number of combination thin film layers is necessarily limited to the number of layers that can be deposited while still producing a transparent laminate.

9. Fourth and regarding the 35 U.S.C. 103(a) rejections of Claims 13 – 22, the applicant attempts to rebut the *prima facie* case of obviousness by showing unexpected results for the claimed substrate temperature ranges of 340 K to 410 K (independent Claim 13) and 340 K to 390 K (independent Claim 14). In response and as acknowledged by the applicant on page 6, paragraph 1, of the response filed on 11/8/2002 (paper #15), the prior art teaches a substrate temperature of 573 K or lower (Anzaki et al.) and between about 296 K and 453 K (Kenzo et al.). Both of

these temperature ranges completely encompass the applicant's claimed temperature range. While the applicant can rebut a *prima facie* case of obviousness by showing unexpected results for a narrow range within a broad range taught by the prior art, this is not the case in the instant situation. For example, applicant's Claim 13 recites a substrate temperature range of from 340 K to 410 K, a range that spans 70 K. The range taught by Kenzo et al. (i.e., 296 K to 453 K) spans 157 K. As such, the applicant's claimed range takes up nearly half of the entire range taught by Kenzo et al., and is squarely in the middle of the range taught by Kenzo et al. Due to the dynamic nature of physical properties in general, one of ordinary skill in the art would not expect the entire temperature range disclosed by Kenzo et al. to work equally well. Simply showing that the middle half of the range taught by Kenzo et al. is preferred is not "unexpected".

10. Further, the examiner notes that, in order to rebut a *prima facie* case of obviousness by establishing criticality / unexpected results, the results (i.e., the evidence of non-obviousness) must be commensurate in scope with the claims which the evidence is offered to support (See MPEP 716.02(d); *In re Clemens*, 206 USPQ 289, 296 (CCPA 1980); and *In re Grasselli*, 218 USPQ 769, 777 (Fed. Cir. 1983)). This is not the case in the instant application. First, the examiner notes that samples (1) – (4) were produced using temperatures within the applicant's claimed range, while samples (5) – (8) were produced using temperatures outside the applicant's claimed range. However, the lowest temperature tested within the applicant's claimed range was 353 K (sample (2)). Temperatures tested below 353 K include 333 K (sample

(5)) and 303 K (sample (6)), both of which are outside the applicant's claimed range. As such, why is 340 K the critical low-end cutoff point for substrate temperatures? The examiner notes that the low end of the claimed range (i.e., 340 K) is much closer to 333 K (i.e., a temperature which gives undesirable results according to the applicant) than to 353 K (i.e., a temperature which gives desirable results according to the applicant). As such, how does the applicant know that temperatures between 340 K and 353 K give the desired results (i.e., are "critical")? Therefore, this showing of criticality / unexpected results is not commensurate in scope with the claims of the instant application. Second, the examiner notes that independent Claims 13 – 14 are drawn to depositing the silver films by any vacuum dry process (e.g., vacuum vapor deposition, ion plating, sputtering), while the results shown in samples (1) – (8) were obtained using a sputtering method only (see page 26 of the applicant's specification). Thus, the results are not commensurate in scope with the claims. Third, the examiner notes that independent Claims 13 – 14 are open to a number of different silver-containing films, such as silver and one member or two or more members selected from the group consisting of gold, copper, palladium, platinum, manganese, and cadmium (see pages 20 – 21 of the applicant's specification and page 11 of the applicant's remarks filed on 4/29/2002), while the results shown in samples (1) – (8) were obtained using only silver containing 5% by weight of gold (see page 25, line 25, and page 26, lines 1 – 3 of the applicant's specification). Therefore, the results are not commensurate in scope with the claims. Fourth, the applicant's claims are open to any number of

combination thin film layers greater than or equal to three so long as a transparent laminate is produced, while the results shown in samples (1) – (8) were only obtained for three combination thin film layers. Thus, the results are not commensurate in scope with the claims. The applicant argues that, because they have never argued the criticality of a sputtering process over other vacuum dry processes and the criticality of the particular silver-containing film over silver-containing films in general, the specification fully complies with 35 U.S.C. 112 and it is irrelevant whether or not the claim scope is broader than the processes described in the specification. In response, the examiner strongly disagrees with the applicant's statement that it is irrelevant whether or not the claim scope is broader than the processes described in the specification. In this case, it is extremely relevant. The applicant relies upon the processes described in the specification to show "unexpected results". The claims must be commensurate in scope with the showing of unexpected results, and therefore commensurate in scope with the processes described in the specification used to show the unexpected results. How does the applicant know that the claimed temperature range is critical for vacuum dry processes other than sputtering? How does the applicant know that the claimed temperature range is critical for different alloys of silver than the one tested? The applicant has provided no data to support a showing of unexpected results commensurate in scope with the claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wesley D Markham whose telephone number is (703) 308-7557. The examiner can normally be reached on Monday - Friday, 8:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Wesley D Markham
Examiner
Art Unit 1762

WDM
November 19, 2002